DOCUMENT RESUME

ABSTRACT
        This paper addresses distance learning and academic values
from the author's perspectives as student, part-time scholar, and president
of the Open University (United Kingdom). The following six propositions are
discussed: (1) new technologies may change higher education; (2) new
technologies are always superseded by newer technologies; (3) most use of
technology in universities lacks clear institutional aims; (4) the
institutional aims should be to cut costs, leverage learning, and transform
thinking; (5) such aims require the establishment of learning systems; and
(6) the creation of learning systems requires institutional technology
strategies. The current technology strategy at the Open University is then
described, focusing on developments related to: the use of CD-ROM technology
in a new introductory science course that is being taken by over 4,000
students; the use of computer conferencing by students in a wide range of
courses; the techniques developed for effective tutoring of students by
e-mail and computer conferencing; uses of the World Wide Web, particularly in
conjunction with broadcast television; and the use of technology in the
logistics of the learning system. (MES)

DISTANCE LEARNING AND ACADEMIC VALUES

by

Sir John Daniel

Vice-Chancellor, The Open University, UK

President, United States Open University

Introduction

It is a pleasure to be with you today. I appreciate the invitation to speak at this important annual event. At the moment the role of distance learning in American academic is an even livelier topic than when you invited me. I hope that I can nourish your debate on the topic on this campus. Furthermore, our planning for the launch of the United States Open University is now further advanced and I can say a bit more about that.

My title today is *Distance Learning and Academic Values* and I shall address it from three perspectives. First, the perspective of a student. I have been a part-time student for most of my career since I obtained my doctorate by full-time study and research. Over that time I have taken a variety of graduate and undergraduate courses in distance and classroom mode from six universities and a military college. Since I went to the Open University in 1990 I have completed a diploma in Theology and a Master's in Educational Technology. Being a student gives you a pragmatic, consumer's view of all the wonderful things that colleges and universities offer to the world. It also allows you to make judgements about whether the course you are taking is illuminated by true academic values.

This year I've just finished taking a new Open University course called *T171: You, Your Computer and the Net, Learning and Living in the Information Age* which the OU ran as a pilot this year with 900 students. It's a 36-week course, equivalent to one-quarter of a year of full-time study. I'm did it partly for the subject matter and partly because it uses the Web intensively and I want to form my own judgements about the Web as a teaching medium. I'll share those judgements in the discussion period if you're interested. Let me just say now that finding time to study the course while running Britain's largest university and undertaking a lot a speaking engagements here in the States. However, I'm glad I did T171 because 12,000 students have applied to take it in 2000, which is a record even by our standards.

My second perspective is that of a part-time scholar. One of my post-doctoral adventures as a student was the Master's degree in Educational Technology. It took me 25 years to complete - but I'm not ashamed of that for this is the era of lifelong learning.

One result of those studies was a book entitled *Mega-universities and Knowledge Media: Technology Strategies for Higher Education.* I have been flattered by the enthusiasm with which it has been received here in North America. A particularly satisfying moment was to meet a member of KPMG's higher

education consultancy team carrying a copy that was thoroughly dog-eared with constant use. The danger of writing about technology and universities, of course, is that technology changes rapidly. But so far I dare to think that what I wrote in *Mega-Universities* is standing the test of time – three years of time anyway.

My third perspective is that of president (in your terminology) of the world's most successful distance-teaching university. It is not the largest such university, indeed of the twelve open universities that now enroll over 100,000 students my own Open University is one of the smaller. However, all the world's other open universities consider us a benchmark of success because of the combination of scale, quality, intellectual leadership and our dedication to academic values.

My talk today derives from those three perspectives. Distance learning using technology is a fast moving world and I like to think that these three perspectives act as a reality check on each other. If you believe that a course that your university is offering is wonderful, then taking it as a student lets you test that perception. Studying as a scholar the successful and unsuccessful uses of technology in institutions around the world reminds you that there is no single map to the buried treasure – because there is no single cache of buried treasure.

Six propositions

I aim to convince you of six propositions and honesty requires that I lay out my wares up front.

Proposition one is that new technologies may change higher education.

Proposition two is that new technologies are always superseded by newer technologies.

The third proposition is that most use of technology in universities lacks clear institutional aims.

Proposition four is that the institutional aims should be to cut costs, leverage learning and transform thinking.

Proposition five is that such aims require the establishment of learning systems.

And the final proposition is that the creation of learning systems requires institutional technology strategies.

Let me unpack those statements one by one.

Proposition 1

My first proposition, that new technologies may change higher education, will come as no surprise. You read the hyperbole everywhere. Campuses will disappear, business corporations will take over the function of universities, thousands of faculty will lose their jobs.

Maybe, but let's all take a valium and consider two key elements of reality.

The first is that students have gathered together on campuses since at least 1088 when the University of Bologna was founded.

Over the 911 intervening years students have attended lectures and libraries, taken examinations, made friends, fallen in love, got drunk, fallen into bed, fought with the townspeople and generally learned about life.

The University of Oxford was founded by rowdy British students who were thrown out of the University of Paris 800 years ago.

I made the reverse journey, from undergraduate at Oxford to doctoral student at Paris. I was there in 1968 when the University of Paris was a battlefield again, though I took great care not to get thrown out of the University in the final stages of my doctoral research.

Never underestimate history. Rumors of the death of the campus are greatly exaggerated. Campuses provide a protected environment where our young people can find out about life, love, and learning while sparing the rest of the community the sight of these often unsightly processes.

The second element of reality and history is that the impact of new technology on education has always been exaggerated.

Back in 1841 one Josiah Bumstead proclaimed that the inventor or introducer of the blackboard deserves to be ranked among the best contributors to learning and science if not among the greatest benefactors of mankind.

Since then each new technology, radio, film, television, programmed learning, computing, videoconferencing has been hailed as the harbinger of a revolution in education and compared in importance to the printing press. Of course, the revolution never happened. Will today's new technologies – notably the web - be any different?

In fact they may be. Today's new technologies are emerging from the convergence of computing and telecommunications. Add in the learning sciences and we may have something qualitatively different from what has gone before.

There's a useful term for this meeting of information and communication technologies and cognitive science: the *knowledge media*.

It's a useful term, better than multi-media or the information superhighway, because it reminds us that these technologies mediate knowledge in ways not previously possible.

You can see the awareness of that in any university. Faculty sense, almost instinctively, that this time it's different.

They may not subscribe to the view that the knowledge media will change fundamentally the relationship between people and knowledge - but they suspect that the knowledge media do have radical implications for academic work. That's because the knowledge media are about the capturing, storing, imparting, sharing, accessing, creating, combining, transforming and synthesizing of knowledge. The knowledge media are not just a technical format, such as CD-ROM or computer conferencing, but the whole presentational style, the user interface, the accessibility, the interactivity.

For our ability to transmit and manipulate symbols – which is the heart of the academic endeavor the knowledge media are such a quantitative advance, such a quantum leap, that they represent a qualitative change.

Complacency is not in order. This is going to change universities.

Proposition 2

But then I come to my second proposition, that technology changes too. Indeed, it challenges us by changing quite rapidly. That means that our perceptions of the role of different technologies change rapidly too.

For example, I observe that the assumptions that American universities make about the application of technologies in teaching have changed radically in just the last three years. Three years ago

videoconferencing was all the rage.

Conferences about it attracted thousands of people and distance learning, meaning videoconferencing, was the flavor of the year. Three years on videoconferencing is already passé. Fortunately, just as university presidents began to be put off by the cost and complexity of remote classroom technology, faculty have discovered a new fad.

In Kenneth Grahame's touching fable, *Wind in the Willows,* Toad of Toad Hall instantly forgot his passion for his horsedrawn house trailer when a new technology, the motor car, sounded its horn and roared past, forcing him off the road into the ditch.

"Poop, poop" murmured Toad as he picked himself up and watched the automobile roar off into the distance. "Click, click" murmur our faculty members as, mouse in hand, they explore the marvels of the World Wide Web.

This year Web-based teaching is the flavor of the year in the United States. Everyone is jumping in, either on their own initiative or because the provost has mandated it.

Where will we be in three more years? What will distance learning mean then? Mountaineers say that they climb mountains 'because they are there'. Do we engage with new technology simply because it is there? Or do we have a deeper purpose?

Proposition 3

That brings me to proposition three. Too often the use of technology in universities lacks clear institutional aims. There are exceptions. Back at the turn of the century the University of Wisconsin was enjoined to make the boundaries of the campus the boundaries of the state and important developments followed, not least the University of Wisconsin's teleconferencing systems.

But are such developments in the institutional mainstream today?

We hear of prestigious universities making investments in distance learning - but being rather careful to build a Chinese wall between those activities and the mainstream degree credit teaching on which they think their reputation is based. I think that is unethical, but that's a different debate.

Perhaps the clear institutional purpose is to make money, in which case the question is whether technology-based teaching is a goose that will lay golden eggs.

In the absence of clear institutional purposes faculty, of course, have their individual purposes. These range from innocent curiosity through megalomania to a desire to decrease teaching load.

Innocent curiosity is fine and important. I noted earlier that the knowledge media may be qualitatively different from previous media. If they really are going to transform the relationship between people and knowledge then the more faculty know about them the better.

Megalomania is also pretty innocent. Most people who go into the academic trade have traces of megalomania - I certainly own up to that - so media that carry a faculty member's message and image to a large audience are highly congenial.

At the Open University we have no difficulty getting even the most distinguished international academics to take part in our broadcast TV programs because they know they will reach an audience of millions through the BBC.

The Web gives us all the chance to present our lecture notes and view foils to an expectant world. The only problem, of course, is that most academics are not yet proficient html or xml programmers, so we have what my old friend Tony Bates of the University of British Columbia calls, in a telling phrase, the Lone Ranger and Tonto approach to Web-based teaching. The Lone Rangers are the faculty members who think the world would be a better place if it had instant access to their lecture notes.

The Tontos are the graduate students who have learned Web programming and use those skills to load up this timeless academic material for public display.

The tempting next step for the faculty member, having done this, is to decommit further from actual teaching and let the graduate assistants help students through the Web-based material.

The least one can say, even if faculty don't take this last step, is that institutions may not always be well served by displaying their academic wares to the world in this idiosyncratic way.

But criticism is easy. What aims should institutions have for technology-based teaching?

Proposition 4

That is my fourth proposition: the key aims should be to cut costs, to leverage learning and to transform thinking. I'll say a quick word about each.

In other fields of human endeavor the key contribution of technology is to give higher quality at lower cost. It's time universities adopted that goal. The problem of course is that for too long universities have assumed that quality is proportional to exclusivity and exclusivity is proportional to cost

I have good news for you. The developments that I shall describe are nothing less than the rupture, once and for all, of that retrograde and insidious link between quality, cost and exclusivity.

We can now have mass access, top quality and low cost all at the same time – and that is what the world needs.

Around the world today we need the equivalent of one large new university to open every week just to keep participation rates in higher education constant. Most of the world can't afford the campus model we know and love. A new approach is needed to avert a crisis.

The second institutional aim that I propose is leveraging learning. We talk about technology-based teaching - and putting the view foils of our lectures on the Web is an elementary attempt at just that. The real purpose, of course, should be technology-based learning.

Moving the focus to learning, rather than teaching, is the single most important key to success in the new era of scale. Yet it is widely ignored.

Prophets like Professor Jack Wilson of Rensselaer Polytechnic put it very well:

> "The current teaching/learning paradigm is one where the faculty are expected to work very hard (preparing for class and lecturing) while the student sits back and listens. I want to reverse that dynamic."

And behind all this, of course, the real purpose is to transform thinking.

The key purpose of universities is the academic mode of thinking, which, unlike the ideological mode of thinking, starts from evidence and then reasons and argues its way to hypotheses that it can test. Put another

way, the core purpose of the university is to inculcate in its students an attitude of systematic skepticism. That is why true universities will always be safe from take-over by commercial interests and why 'for-profit' universities can never be true universities.

Systematic skepticism and the academic mode of thinking make corporations and political bodies nervous. People with the habit of the academic mode of thinking look for the realities behind the spin doctoring of politics and the brand promotion of commerce. This is an inconvenient habit in a consumer society.

It is no accident that the pressure on universities from government and business is all directed at the creation of human capital, giving people the skills they need as workers in a consumer society.

But historically universities have paid at least as must attention to the creation of social capital, facilitating through their teaching the creation of those associations and networks of trust and understanding between people that define a civilized society.

If many universities feel vulnerable today, it is because they have reneged on their mission to transform thinking and are content merely to transmit standard skills and accepted orthodoxy to the next generation. We are overstressing human capital formation and understressing social capital formation.

Proposition 5

That comment leads me to my fifth proposition. The pursuit of these aims and the pursuit of scale requires the establishment of learning systems.

Under the traditional campus model individual faculty are given responsibility for teaching.

Each has the latitude to plan the curriculum, organize the learning environment, instruct the course and assess the students' achievement. It is a robust model which does not require much organization on the part of the university. At its best students are inspired, at its worst they are alienated.

Quality is therefore variable and there is little scope to increase quantity and gain economies of scale. The times call for a new model which I call the learning system.

Instead of giving individual faculty the responsibility for teaching students the university must give the collectivity of its faculty the responsibility for student learning. This is a radical change.

The good news is that this revolution is already under way and the evidence of its success is there for all to see. The best examples of learning systems that have scaled it up, and the most important development in higher education in our lifetimes, are the mega-universities.

These are the large open universities that exist is various parts of the world. There are eleven of them and they enroll three million students between them. They address the crises of access, cost and flexibility in higher education in a dramatic fashion.

I shall tell this extraordinary story through the example of the Open University.

In doing so I take little credit for its success because I am a relatively recent arrival on its staff. I was in Canada during the twenty crucial years of its creation and growth. I joined the OU in 1990 because it seemed to me that this was the future of the academy.

The Open University pioneered a revolution in higher education and has maintained world leadership in technology-based learning for a generation. Today the Open University is a learning system which successfully combines access, scale, knowledge and quality. On the way it has acquired unparalleled

expertise in learning.

This is the secret of the Open University.

Scale means 160,000 students in degree credit programs, with some 1,400 at doctoral level and 40,000 graduate students.

Access means a flexible and efficient learning system that has been consistently successful in taking people with weak educational backgrounds through to degree completion.

Quality means that in national assessments of teaching quality the Open University ranked 11th out of 101 UK universities last year for the excellence of its programs. Next year I expect us to be in the top ten

Because we have scored excellent ratings in all four of the subjects that were assessed this year. Indeed, we were the only University to get the top score of 24/24 for General Engineering, Oxford, Cambridge and Imperial College, London, all of which reckon to have respectable Engineering schools, had to be content with 23/24.

So much for quality. Knowledge means that, by bringing teams of faculty and specialists together for each course, the academic paradigms are constantly driven forward.

Put another way, the key to OU's success is that it has integrated into a learning system the four essential elements of effectiveness. They are: well-designed multiple media learning materials; personal academic support to each student; efficient logistics; and faculty who also conduct research.

Because it is a technology-based learning system the Open University's methods are constantly evolving. It is now incorporating the *knowledge media* into its courses and teaching system. The fundamental challenge is to use the knowledge media at scale to help students to think better.

I should add that the Open University carries a heavy freight of idealism. Its inaugural ceremony was held in 1969, in the week that the Apollo astronauts returned from the first landing on the moon. It was a time when everything seemed possible.

The first Chancellor, Lord Crowther, declared that the aims of this new University were to be 'open as to people, open as to places, open as to methods, and, finally, open as to ideas'. This was and is a project aimed squarely at increasing the intellectual autonomy of individuals so that they may play more active and critical roles as citizens in a democracy. It aims to create human capital and social capital.

The Open University began operations in 1971 with a first cohort of 25,000 students and a generation later it can claim considerable success in achieving the objectives set by its founders.

Open to people

In order to be open to people the Open University's most radical step was to remove all academic pre-requisites for entry. In 1999 the proportion of new Open University students without the conventional entry qualifications for UK universities is higher than ever.

Each year this category accounts for one-third of the new *graduates* of the Open University, supporting the conviction that, with proper learning systems, access to success in higher education can be greatly scaled up.

Open to places

In pursuit of its mission to be open as to places the Open University has become an increasingly international

institution. In 1999 more than 30,000 students are taking Open University courses outside the UK.

The largest concentrations are elsewhere in the European Union, the former Soviet bloc (where courses are available in local languages), Hong Kong and Singapore. There are also growing programs in Ethiopia, Eritrea, South Africa, and India.

Last year the Open University created a new sister institution, the *United States Open University* to develop activities and partnerships in the US.

The USOU will offer a selection of courses next year and is looking for institutional partners, both community colleges and universities, who would like to advance their own institutional agendas through a link with the traditions, methods and courseware of the Open University. The founding Chancellor of the USOU, Dr Richard Jarvis, took office in September. Richard has a distinguished background on many years in the SUNY system and most recently as the Chancellor of the University and Community College System of Nevada.

Open to methods

Openness to methods has caused the OU's use of media and technology steadily to evolve. The TV programs broadcast on the terrestrial channel BBC2 for 20 hours per week are still the most visible expression of the Open University's openness to methods to the general public. Some of them have an audience of over two million viewers.

Less visible to the public have been the newer teaching and learning media that the Open University has added since its foundation. Of particular note are personal media, i.e. equipment such as audio and video cassette recorders and personal computers owned by students. Last year we shipped 1.1 million audio cassettes to students and nearly half a million hours worth of videotape viewing.

Right now we have 60,000 students on-line from home and they are exchanging 200,000 messages a day, mostly with each other but also with the associate faculty members who are their personal mentors. That's a density of internet use by students that few universities can match. In 1998 we sent out 340,000 floppy disks to students. That was 20% down on the year before but we sent out 130,000 CD-ROMs and those numbers are going up fast.

Open to ideas

Openness to ideas is the *raison d'être* of any university. The Open University has fulfilled this idea through a commitment to research and through its practice of developing courses in teams.

A key facet of openness to ideas is that all areas of the University house research of international caliber. A notable example is the work of the OU's Interplanetary Sciences Research Unit, which is a major European center for investigation into the possibility of life on Mars. A month ago another colleague in that unit startled the world by announcing that there was a tenth planet in our solar system, something that an American astronomer has since also claimed using a different methodology.

The course team gives the Open University's courses much greater quality and intellectual vitality than you usually get in distance teaching - or in classroom teaching for that matter.

In the national Research Quality Assessments which parallel the Teaching Quality Assessments I mentioned earlier the OU ranks 28th out of the 100+ UK universities. This certainly does not put us in the major research league but we are well placed in the second division and we award over 100 Ph.D.s annually.

I am sure that this commitment to research partly explains why the OU ranks in the top 10% for teaching

quality and is part of the elite group of British universities that have most of their programs rated as 'excellent'. This includes subjects like Music, Chemistry, Biology, Physics and Earth Sciences, where distance education would not appear to enjoy a natural advantage.

Institutional technology strategies

Having given you that illustration of the creation of a successful academic learning system I return to my final proposition.

Proposition 6

The key lesson that you should derive from the story of the Open University is that we need university-wide technology strategies to take full advantage of the knowledge media. Letting individual faculty and departments do their own thing in the usual way will not deliver the goods.

Why? Because a *laisser-faire* approach is likely to increase costs and create excessive differentiation that students will find burdensome. Universities now admit the need to increase productivity. Technology can raise productivity, but only by reorganizing the teaching-learning process to play to our strengths.

Taking a university-wide approach to the modernization of the teaching and learning process is a more important technological change than asking the IT center to choose the perfect computing platform or Web template and impose it on everyone.

Here I realize that I am preaching to the converted because your own technology strategy at Indiana University, that has been developed under Vice-President Michael McRobbie's leadership, is a model of the genre. I much admire the way that you have pulled together every aspect technology's impact on Indiana University into your Information Technology Strategic Plan, *Architecture for the 21st Century*.

You clearly agree that, except in some highly specialized areas like computer aided-design, undergraduate computer labs. are yesterday's answer. Faculty would no longer put up with sharing workstations - why should students? However, once students have their own laptops you owe it to them to maximize their usefulness.

That means organizing network access from on and off campus until wireless takes over. It means creating some commonality between the computing environments that students will meet as they progress from course to course.

These are not easy issues. At the Open University we have already gone through several generations of computer conferencing software. Let me pay tribute to the quality of FirstClass, a conferencing product of Canada's SoftArc Company of which the OU is one of the world's largest users.

To discover the best systems for students, faculty must have latitude to try new offerings in their courses. However, there must be a pan-university mechanism to compare results and generalize the best solutions as each technology becomes routine. The University itself has to become a learning organization.

Another reason for a strategic approach is to carry the students. They are, in the mass, a conservative lot who are skeptical of new approaches. Listening to lectures is less work - and requires less initiative - than participating in a team on a studio course or working through distance learning materials. Here again, an institution-wide approach to selling the new methods to students is helpful.

In my *Mega-Universities* book I summarize industrial experience of the technology adoption life cycle to suggest how technology-based teaching can be made attractive to the mass of students.

Its easy to fall into the trap of using teaching technologies that appeal to the early adopters but have difficulty crossing the chasm that separates those early adopters from the mass of students.

The whole purpose of using technology in teaching is to give better value to students. Choices must be pragmatic because technologies change rapidly.

A commitment to a particular technology for its own sake is unlikely to yield sustainable advantage. Indeed, there is evidence that students are voting with their feet away from courses delivered through a single technology – whatever it is. So we must assess the potential of technology in a generic manner. A key generic decision concerns distance education.

The basis of a technology strategy is to identify, in the light of the university's core competencies, the students that technology-based instruction will serve and the programs it will deliver.

Technology strategy at the Open University

To pull all this together let me end by commenting on the current technology strategy of the Open University. We don't have a choice about whether to have a technology strategy or not. We are a technology-based learning system and technology changes constantly. We must evolve with it.

What is strategy? Webster defines it as 'the art of devising or employing plans or stratagems towards a goal' and the Oxford dictionary says it is 'the art of projecting and directing the larger movements and operations of a campaign'.

First then, what is the goal? What is the purpose of the campaign we are directing? What are the strategic challenges facing the Open University, especially those involving new technology?

In harnessing the knowledge media the Open University faces the same key challenges as most universities, namely:

- Teaching effectiveness and learning productivity;
- Reinforcing the sense of academic community;
- Production and delivery of courses and intellectual assets;
- Scaleable growth and logistics in distributed institutions.

In this context several developments are particularly important for the Open University in 1999:

1) the use of CD-ROM technology in a new introductory science course that is being taken by over 4000 students;

2) the use of computer conferencing by students in a wide range of courses;

3) the techniques developed for effective tutoring of students by e-mail and computer conferencing;

4) uses of the World Wide Web, particularly in conjunction with broadcast television; and

5) the use of technology in the logistics of the learning system. I shall take them in turn.

CD-ROM

I start with CD-ROM. The 1999 version of the OU's first level Science course, *S103 Discovering Science,* uses the full multimedia capabilities of CD-ROM on a large scale. This 15 credit course invested millions of

dollars in making eleven CD-ROMs which engage each of the 4000 students on the course in between 60 and 80 hours of work, which is about one-seventh of the total work required by the course.

The University considers that for the next few years CD-ROM is the only technology that can bring the advantages of interactive multimedia into most students' homes.

These CD-ROMs are proving enormously popular with students, who seem to be convinced that the highly interactive nature of the medium increases their learning productivity and challenges them to think by forcing them to answer questions.

Computer Conferencing

I should flag computer conferencing, which has been the most successful large-scale application of the knowledge media in the Open University so far. Students enjoy being able to communicate with each other and there are 6,000 active conferences to prove it.

They also like the ease of communication with their tutors and with the University generally.

Tutors can assemble conference groups on the network. In my own course I had to work on a conference with six other students, only one of whom I ever met in person, to design and build and website.

Computer conferencing also allows students to create their own groups for various social and professional purposes. The Open University Student Association plays a very helpful role in moderating these conferences.

Tutoring

Third, the tutorial support system, especially the care given to commenting on student assignments, is a key element in the Open University's success.

Pilot projects of increasing scale are being conducted to test newly developed techniques for handling the electronic submission of student assignments. T171, the course I am taking this year, includes electronic assignment handing. I got my second assignment back with three pages – some 1,200 words - of helpful commentary from my tutor. And a grade which I thought was very fair!

Each year the University handles over one million student assignments and has sophisticated monitoring and quality assurance arrangements for this purpose.

The assignment handling process is so central to the quality of the University's teaching that it simply cannot afford to introduce new methods in this area until they have been proven to be reliable to operate at scale and popular with students. That's why my course is a pilot limited to 900 students. Projections are for over 12,000 students in the course next year so it is essential that the supporting systems be robust.

The World Wide Web

Fourth, let me comment on the World Wide Web.

In twenty-five years of successful teaching the University has learned that there is no magic single learning medium. Its plan is therefore to integrate the use of the Web into the University's broadly based multiple media learning system, not to move all teaching and learning activities onto the Web. For example, the Web is wonderful, but it's a pain if you do a lot of your studying in airports, planes and commuter trains.

However, the University sees particularly exciting opportunities for combining the use of the Web with

broadcast television.

Broadcast television remains a core element of the Open University's academic strategy. It is the primary vehicle through which it achieves its charter goal of 'promoting the educational well-being of the community generally'. The University is increasingly designing its TV programs, which sometimes attract an audience of millions, with this wider general audience in mind.

Broadcast television is about to undergo a digital revolution that will increase the number of channels and offer possibilities for interactive programming. Together the Open University and the British Broadcasting Corporation see exciting possibilities of combining the strengths of broadcast television (the ability to reach large audiences and create interest in a topic) with the advantages of the Web (to allow individuals to explore the topic interactively and in greater depth).

Logistics

Finally, a word about administration and logistics. The Open University operates on a large scale and relies crucially on the efficiency and effectiveness of its logistic and administrative systems. We have 160,000 students in degree-credit programs during our main examination session last month they wrote 126,000 exams in 520 courses in exam centres in 108 countries. 1,500 examiners are now engaged in grading these exams.

This is an area where new technology can help to improve service levels by giving staff and students up-to-date information wherever they are. The University has just finished spending $16 million in a five-year program to redevelop its record and logistic support systems and has taken advantage of this project to modernize many of its business processes.

It has been remarkably successfully and staff are currently making 100,000 transactions per day on the new system. In the next stage the benefits of access to these systems will be made directly available to students and tutors.

The Knowledge Media Institute

In all these developments the University is greatly assisted by its Knowledge Media Institute (KMi). This was set up in 1995 with a mandate to combine leading edge development of the Web, the Internet and on-line communication generally with the scaling up of the resultant technologies to reach large numbers of students.

The KMi has a special commitment to the development of enabling technologies for students with disabilities. It is constantly developing new applications of the Internet (such as its world-wide telepresence system, KMi Stadium).

In a short time the KMi has become a focus for the collaborative development of teaching technologies by all faculties of the Open University.

Epilogue

Those then are my six propositions. In expounding them I have tried to show you how distance learning can be absolutely consistent with academic values and to share some of the lessons of the Open University's success. I have enjoyed talking to you because you too are engaged in the same battle to create a university that is appropriate for a new millennium.

Winston Churchill once said: "the United States will always do the right thing, after having exhausted all other possibilities". If my remarks help you to exhaust some of those other possibilities more quickly it will

have served a useful purpose.

Reference

Daniel, John S. (1996) *Mega-universities and Knowledge Media: Technology Strategies for Higher Education,* London, Kogan Page

---

Back to Speeches